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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,368	10/16/2001	Maria Yuang	13612-002001	4204
26161	7590	12/05/2005	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			MURPHY, RHONDA L	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 12/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/978,368	YUANG ET AL.	
	Examiner	Art Unit	
	Rhonda Murphy	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-6 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is responsive to the amendment filed on September 6, 2005. Accordingly, claims 2-3 have been canceled and claims 1 and 4-7 are currently pending in this application.

Claim Objections

1. Claim 4 is objected to because of the following informality: On line 2 of claim 4, "wi" shall be replaced with "di". Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mysore et al. (US 6,810,426) in view of Lu (US 6,480,911).

Regarding claim 1, Mysore teaches a scheduling method comprising the steps of: (A) when packet P_i of flow i arrives, determining whether the credit c_i (deficit) of flow i is larger than the size of packet P_i (col. 3, lines 45-51; 59-63) based on the normalized weight w_i , window index d_i and credit c_i corresponding to the flow i , wherein the normalized weight w_i , window index d_i and credit c_i are stored in a table (col. 9, lines 54-58; stored in memory or databases; Figs. 7 and 8); (B) if the credit c_i of flow i is

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smaller than the size of packet P_i , adding the weight w_i (quantum size; refer to col. 4, lines 26-28) of flow i to the credit c_i , incrementing the window index d_i , and executing step (A) again (col. 4, lines 5-21); (C) if the credit c_i of flow i is larger than the size of packet P_i , the packet P_i is placed into the window pointed by the window index d_i (col. 3, lines 59-67; col. 4, lines 1-3; window represented by queue, pointed by round robin pointer col. 4, lines 19-21); and (D) subtracting the size of the packet P_i from the credit c_i (col. 4, lines 40-41).

Mysore, fails to explicitly disclose a normalized weight. However, weight normalization is known in the art for obtaining a standard or uniform value.

Furthermore, Lu teaches a normalized weight (col. 10, lines 25-27).

In view of this, it would have been obvious to one skilled in the art to modify Mysore's method, by including a normalized weight in order to obtain a value derived from averaging the weights.

Regarding claim 4, Mysore teaches a step (E) for writing the updated window index w_i and credit c_i into the table (col. 9, lines 54-58; Figs. 7 and 8).

Regarding claim 5, Mysore teaches sequentially outputting packets placed in the windows of the output queue (col. 2, lines 20-23).

Regarding claim 6, Mysore teaches when all packets are pushed out and the window is empty, the table is updated to have initial values (col. 10, lines 8-12).

Allowable Subject Matter

3. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 7, prior art fails to particularly disclose the normalized weight of the flow i is $w_i = W \times w_i^* / (w_1^* + w_2^* + \dots w_N^*)$, w_i^* being the weight of flow i and W being the size of a window.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Rhonda Murphy
Examiner
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CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 20
11/28/05